

### Abstract

The invention relates to a return-flow-free fuel supply system (1) for an internal combustion engine, in particular of a motor vehicle, having at least one fuel pump (8), by means of which fuel can be pumped from a first region (2) of a fuel reservoir into a pressure region (12) communicating with a fuel distributor (18), at least one suction jet pump (38), through which fuel pumped through a suction jet pump line (34) by means of the fuel pump (8) flows and through which fuel can be pumped from a second region (4) of the fuel reservoir into the first region (2), at least one means (20, 24, 30) that regulate and/or control the pressure in the pressure region (12), and at least one check valve (14), by which at least a portion of the pressure region (12) can be blocked off from the fuel pump (8).

The invention provides that the means (20, 24, 30) that regulate and/or control the pressure in the pressure region (12) include at least one electrically actuatable magnet valve (40; 44), which is disposed downstream of the check valve (14) in the suction jet pump line (34).

Fig. 1